

Industrial Valve Manufacturing: 2002

Issued January 2005

EC02-311-332911 (RV)

2002 Economic Census

Manufacturing

Industry Series



USCENSUSBUREAU

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU



CONTENTS

Introduction to the Economic Census	v
Manufacturing	ix

Tables

1. Historical Statistics for the Industry: 2002 and Earlier Years ...	1
2. Industry Statistics for Selected States: 2002	2
3. Detailed Statistics by Industry: 2002	3
4. Industry Statistics by Employment Size: 2002.....	4
5. Industry Statistics by Primary Product Class Specialization: 2002	5
6a. Products Statistics: 2002 and 1997	6
6b. Product Class Shipments for Selected States: 2002 and 1997 .	10
7. Materials Consumed by Kind: 2002 and 1997.....	12

Appendixes

A. Explanation of Terms	A-1
B. NAICS Codes, Titles, and Descriptions	B-1
C. Methodology	C-1
D. Geographic Notes	--
E. Metropolitan and Micropolitan Statistical Areas	--
F. Comparability of Product Classes and Product Codes: 2002 to 1997	F-1

-- Not applicable for this report.

Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
332911, Industrial valve manufacturing 2002..	395	511	45 778	1 886 358	29 715	60 188	1 000 413	5 386 196	3 666 062	9 061 616	'267 959
2001..	N	N	50 340	1 953 860	33 189	68 698	1 087 604	5 423 493	3 924 598	9 322 915	286 772
2000..	N	N	52 561	2 011 652	34 657	73 634	1 111 121	5 451 967	4 101 422	9 455 660	302 694
1999..	N	N	53 549	2 014 647	35 080	72 726	1 092 803	5 358 761	3 913 462	9 230 593	293 140
1998..	N	N	56 237	2 055 360	36 625	76 413	1 119 923	5 664 582	4 259 696	9 940 675	336 126
1997..	429	540	54 294	1 947 182	35 367	72 721	1 050 155	5 115 344	3 781 002	8 965 193	317 610

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
332911, Industrial valve manufacturing												
United States	—	511	291	45 778	1 886 358	29 715	60 188	1 000 413	5 386 196	3 666 062	9 061 616	'267 959
Alabama	—	9	5	1 060	43 191	787	1 685	26 456	138 417	102 757	236 254	'9 187
California	—	62	22	3 382	160 600	2 040	3 443	74 747	456 777	307 358	764 290	'19 375
Connecticut	—	10	8	858	34 273	520	1 057	15 352	127 943	80 402	208 851	'4 130
Illinois	—	24	17	2 343	101 676	1 631	3 385	60 948	285 619	207 366	493 351	'10 153
Iowa	—	9	8	2 607	118 509	1 398	2 912	49 500	258 135	180 671	444 643	'42 627
Massachusetts	—	14	9	1 417	75 516	781	1 603	31 716	142 475	176 667	302 439	'4 236
Michigan	—	19	9	1 074	42 288	747	1 543	23 212	97 357	68 897	167 778	'4 214
Minnesota	—	10	8	1 166	61 366	705	1 378	32 370	143 396	115 790	258 045	'12 168
Missouri	—	11	7	1 682	60 439	1 314	2 534	41 216	180 737	101 520	281 731	'5 196
New Hampshire	—	7	4	679	24 391	500	1 082	11 888	93 393	71 198	167 744	'3 812
New Jersey	—	18	12	2 139	75 873	1 075	1 923	29 319	184 684	182 960	371 325	'9 557
New York	—	23	11	1 709	77 099	1 019	2 112	37 131	225 797	118 240	344 615	'7 476
North Carolina	—	12	9	1 227	42 486	852	1 779	25 320	174 153	83 890	253 979	'2 928
Ohio	—	30	21	2 808	114 957	1 624	3 225	53 679	253 216	156 402	418 236	'24 220
Oklahoma	—	21	12	1 267	55 369	806	1 770	26 541	187 614	139 636	304 480	'7 792
Pennsylvania	—	42	22	2 461	107 076	1 467	2 841	49 084	290 449	171 777	479 310	'8 858
South Carolina	—	6	6	1 767	52 942	1 490	2 955	38 938	161 967	74 456	240 051	'4 225
Tennessee	—	7	5	1 232	52 218	849	1 815	33 507	180 171	95 383	273 397	'12 261
Texas	—	80	40	5 781	236 202	3 902	8 427	138 364	798 002	519 346	1 336 255	'35 317
Washington	4	7	4	135	4 752	95	175	2 650	10 872	8 432	18 090	'229

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
332911, Industrial valve manufacturing	
Companies ¹	number.. 395
All establishments ²	number.. 511
Establishments with 1 to 19 employees	number.. 220
Establishments with 20 to 99 employees	number.. 159
Establishments with 100 employees or more	number.. 132
All employees ³	number.. 45 778
Total compensation	\$1,000.. 2 414 067
Annual payroll	\$1,000.. 1 886 358
Total fringe benefits	\$1,000.. 527 709
Production workers, average for year	number.. 29 715
Production workers on March 12	number.. 29 800
Production workers on May 12	number.. 30 089
Production workers on August 12	number.. 29 659
Production workers on November 12	number.. 29 242
Production worker hours	1,000.. 60 188
Production worker wages	\$1,000.. 1 000 413
Total cost of materials	\$1,000.. 3 666 062
Materials, parts, containers, packaging, etc., used	\$1,000.. 3 102 351
Resales	\$1,000.. 324 669
Purchased fuels	\$1,000.. 15 644
Purchased electricity	\$1,000.. 74 589
Contract work	\$1,000.. 148 809
Quantity of electricity purchased for heat and power	1,000 kWh.. 1 247 738
Quantity of electricity generated less sold for heat and power	1,000 kWh.. -
Total value of shipments	\$1,000.. 9 061 616
Primary products value of shipments	\$1,000.. 7 624 427
Secondary products value of shipments	\$1,000.. 903 471
Total miscellaneous receipts	\$1,000.. 533 718
Value of resales	\$1,000.. 425 372
Contract receipts	\$1,000.. 39 714
Other miscellaneous receipts	\$1,000.. 68 632
Primary products specialization ratio	percent.. 89
Value of primary products shipments made in all industries	\$1,000.. 8 135 719
Value of primary products shipments made in this industry	\$1,000.. 7 624 427
Value of primary products shipments made in other industries	\$1,000.. 511 292
Coverage ratio	percent.. 94
Value added	\$1,000.. 5 386 196
Total inventories, beginning of year	\$1,000.. 1 872 755
Finished goods inventories	\$1,000.. 741 511
Work-in-process inventories	\$1,000.. 502 396
Materials and supplies inventories	\$1,000.. 628 848
Total inventories, end of year	\$1,000.. 1 807 590
Finished goods inventories	\$1,000.. 730 000
Work-in-process inventories	\$1,000.. 504 549
Materials and supplies inventories	\$1,000.. 573 041
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. '3 478 799
Total capital expenditures (new and used)	\$1,000.. '267 959
Buildings and other structures (new and used)	\$1,000.. '31 886
Machinery and equipment (new and used)	\$1,000.. '236 073
Automobiles, trucks, etc., for highway use	\$1,000.. '8 991
Computers and peripheral data processing equipment	\$1,000.. '22 482
All other expenditures for machinery and equipment	\$1,000.. '204 600
Total retirements	\$1,000.. '166 861
Gross value of depreciable assets at end of year	\$1,000.. '3 579 897
Depreciation charges during year	\$1,000.. '220 248
Total rental payments	\$1,000.. 72 773
Buildings and other structures	\$1,000.. 37 580
Machinery and equipment	\$1,000.. 35 193
Total other expenses ⁴	\$1,000.. 485 825
Response coverage ratio ⁵	percent.. 72
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 55 895
Communications services ⁴	\$1,000.. 18 562
Legal services ⁴	\$1,000.. 12 285
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 4 372
Advertising and promotional services ⁴	\$1,000.. 24 110
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 19 106
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 7 221
Management consulting and administrative services ⁴	\$1,000.. 19 758
Taxes and license fees ⁴	\$1,000.. 24 244
All other expenses ⁴	\$1,000.. 300 271

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on 2002 Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
332911, Industrial valve manufacturing											
All establishments	—	511	45 778	1 886 358	29 715	60 188	1 000 413	5 386 196	3 666 062	9 061 616	'267 959
Establishments with—											
1 to 4 employees	8	99	c	D	D	D	D	D	D	D	D
5 to 9 employees	8	46	296	12 370	192	401	7 004	31 226	17 780	49 127	'1 204
10 to 19 employees	5	75	1 053	44 126	659	1 338	22 024	113 352	90 852	211 128	'4 470
20 to 49 employees	2	85	2 927	118 407	1 978	4 011	66 235	285 921	180 640	464 906	'13 533
50 to 99 employees	—	74	5 344	220 457	3 401	6 682	110 886	581 262	376 201	950 707	'38 170
100 to 249 employees	—	77	12 874	550 062	8 025	16 039	279 810	1 583 964	1 070 512	2 661 871	'59 152
250 to 499 employees	—	45	15 832	664 614	10 613	21 574	368 214	2 131 388	1 333 515	3 468 292	'125 445
500 to 999 employees	—	8	4 809	169 203	3 670	7 791	111 305	452 699	390 633	838 874	'14 643
1,000 to 2,499 employees	—	2	g	D	D	D	D	D	D	D	D
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	9	162	1 073	43 896	721	1 461	24 643	113 716	67 063	180 771	'3 735

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
332911	Industrial valve manufacturing.....	511	45 778	1 886 358	29 715	60 188	1 000 413	5 386 196	3 666 062	9 061 616	'267 959
3329111	Gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves.....	65	9 496	379 914	6 030	12 023	198 907	1 028 719	877 550	1 917 392	'43 183
3329113	Industrial valves for water works and municipal equipment (IBBM, AWWA, and UL).....	19	3 903	169 232	2 848	5 733	109 527	587 248	435 238	1 013 163	'45 053
3329115	Industrial ball valves (all metals, pressures, and types), including manual and power-operated, on-off valves.....	38	6 186	253 834	4 293	8 676	140 963	751 857	504 109	1 229 681	'48 554
3329117	Industrial butterfly valves (all metals, pressures, and types), including manual and power-operated, on-off valves.....	21	2 295	103 405	1 317	2 785	46 886	306 200	285 830	588 528	'5 632
3329119	Industrial plug valves (all metals, pressures, and types), including lubricated, cylindrical eccentric, and sleeve-lined.....	10	1 613	67 885	992	2 106	37 695	150 469	136 688	292 701	'38 246
332911B	All other miscellaneous industrial valves.....	51	6 359	276 154	4 203	8 761	150 949	732 902	368 719	1 096 295	'23 687
332911D	Nuclear valves (N-stamp only).....	8	630	35 995	268	553	11 434	76 662	45 934	120 320	'3 349
332911F	Automatic regulating and control valves and parts (except nuclear), power-operated, designed for modulating (throttling) service.....	70	10 973	440 118	6 816	13 633	221 141	1 376 246	794 720	2 210 376	'44 782
332911H	Solenoid-operated valves and parts, except nuclear and fluid power transfer.....	15	2 304	82 334	1 551	3 125	38 370	179 847	112 580	296 301	'8 711

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. **Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
332911	Industrial valve manufacturing	2002.. N 1997.. N	X X	X X	8 135 719 8 031 977
3329111	Gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves	2002.. N 1997.. N	X X	X X	1 471 742 1 317 414
33291111	Gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves, except parts	2002.. N 1997.. N	X X	X X	1 265 765 1 096 897
3329111101	Iron body gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves, including ductile or modular, all pressures (excl. IBBM, AWWA, and UL)	2002.. 29 1997.. 27	X X	X X	319 063 151 528
3329111103	Cast carbon steel gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves	2002.. 26 1997.. 40	X X	X X	281 318 246 593
3329111105	Forged carbon steel gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves	2002.. 14 1997.. 22	X X	X X	138 951 166 262
3329111107	Alloy steel and other metal gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves	2002.. 33 1997.. 54	X X	X X	289 834 274 536
3329111109	Brass and bronze (125 lb w.s.p. or more) gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves	2002.. 22 1997.. 40	X X	X X	208 569 245 875
3329111111	Actuators (power-operated, on-off mounted) for gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves	2002.. 13 1997.. 9	X X	X X	28 030 12 103
33291112	Parts for gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves	2002.. N 1997.. N	X X	X X	79 287 151 393
3329111213	Parts for gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves	2002.. 16 1997.. 39	X X	X X	79 287 151 393
3329111Y	Gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves, nsk	2002.. N 1997.. N	X X	X X	126 690 69 124
3329111YVV	Gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves, nsk	2002.. N 1997.. N	X X	X X	126 690 69 124
3329113	Industrial valves for water works and municipal equipment (IBBM, AWWA, and UL)	2002.. N 1997.. N	X X	X X	975 514 741 713
33291131	Industrial valves for water works and municipal equipment (IBBW, AWWA, and UL), except parts	2002.. N 1997.. N	X X	X X	919 567 681 108
3329113101	Industrial IBBM gate line and tapping valves for water works and municipal equipment	2002.. 8 1997.. 8	X X	X X	401 762 286 115
3329113103	Industrial UL check valves (all pressures) for water works and municipal equipment	2002.. 6 1997.. 8	X X	X X	10 734 15 874
3329113105	All other industrial UL valves (all pressures), including pest indicators, for water works and municipal equipment	2002.. 9 1997.. 6	X X	X X	108 012 46 474
3329113107	Tapping sleeves and crosses for industrial valves for water works and municipal equipment (IBBM, AWWA, and UL)	2002.. 4 1997.. 4	X X	X X	16 686 21 305
3329113109	Fire hydrants	2002.. 6 1997.. 5	X X	X X	243 656 179 544
3329113111	Industrial AWWA check valves (all pressures) for water works and municipal equipment	2002.. 7 1997.. 12	X X	X X	29 029 36 386
3329113113	Industrial AWWA butterfly valves (all pressures) for water works and municipal equipment	2002.. 5 1997.. 8	X X	X X	109 688 95 410
33291132	Parts for industrial valves for water works and municipal equipment (IBBM, AWWA, and UL)	2002.. N 1997.. N	X X	X X	50 105 54 484
3329113215	Parts for industrial valves for water works and municipal equipment (IBBM, AWWA, and UL)	2002.. 8 1997.. 12	X X	X X	50 105 54 484
3329113Y	Industrial valves for water works and municipal equipment (IBBM, AWWA, and UL), nsk	2002.. N 1997.. N	X X	X X	5 842 6 121
3329113YVV	Industrial valves for water works and municipal equipment (IBBM, AWWA, and UL), nsk	2002.. N 1997.. N	X X	X X	5 842 6 121
3329115	Industrial ball valves (all metals, pressures, and types), including manual and power-operated, on-off valves	2002.. N 1997.. N	X X	X X	1 102 392 1 161 437
33291151	Industrial ball valves, all metals, pressures, and types, including manual and power-operated, on-off valves, except parts	2002.. N 1997.. N	X X	X X	966 351 994 946
3329115101	Industrial iron (including ductile) ball valves (all pressures and types), manual and power-operated, on-off valves	2002.. 15 1997.. 11	X X	X X	74 095 80 974

See footnotes at end of table.

Table 6a. **Products Statistics: 2002 and 1997—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
332911	Industrial valve manufacturing—Con.				
3329115	Industrial ball valves (all metals, pressures, and types), including manual and power-operated, on-off valves—Con.				
33291151	Industrial ball valves, all metals, pressures, and types, including manual and power-operated, on-off valves, except parts—Con.				
3329115103	Industrial brass and bronze ball valves (all pressures and types), including manual and power-operated, on-off valves	2002.. 22	X	X	229 427
	1997.. 26	X	X	254 258	
3329115105	Industrial carbon steel (cast and fabricated) ball valves (all pressures and types), including manual and power-operated, on-off valves	2002.. 26	X	X	406 054
	1997.. 31	X	X	365 309	
3329115107	Industrial alloy steel and other metal ball valves (all pressures and types), including manual and power-operated, on-off valves	2002.. 26	X	X	188 498
	1997.. 27	X	X	212 696	
3329115109	Actuators (power-operated, on-off mounted) for industrial ball valves (all metals, pressures, and types)	2002.. 13	X	X	68 277
	1997.. 19	X	X	81 709	
33291152	Parts for industrial ball valves (all metals, pressures, and types), including manual and power-operated, on-off valves	2002.. N	X	X	109 134
	1997.. N	X	X	162 525	
3329115211	Parts for industrial ball valves (all metals, pressures, and types), including manual and power-operated, on-off valves	2002.. 14	X	X	109 134
	1997.. 28	X	X	162 525	
3329115Y	Industrial ball valves (all metals, pressures, and types), including manual and power-operated, on-off valves, nsk	2002.. N	X	X	26 907
	1997.. N	X	X	3 966	
3329115YVV	Industrial ball valves (all metals, pressures, and types), including manual and power-operated, on-off valves, nsk	2002.. N	X	X	26 907
	1997.. N	X	X	3 966	
3329117	Industrial butterfly valves (all metals, pressures, and types), including manual and power-operated, on-off valves	2002.. N	X	X	543 763
	1997.. N	X	X	491 396	
33291171	Industrial butterfly valves (all metals, pressures, and types), including manual and power-operated, on-off valves, except parts	2002.. N	X	X	485 507
	1997.. N	X	X	457 473	
3329117101	Industrial iron (including ductile) butterfly valves, except high-pressure types, including elastomer and fluoroelastics lined, manual and power-operated, on-off valves	2002.. 20	X	X	130 954
	1997.. 20	X	X	119 512	
3329117103	Industrial brass and bronze butterfly valves, except high-pressure types, including elastomer and fluoroelastics lined, manual and power-operated, on-off valves	2002.. 7	X	X	113 070
	1997.. 7	X	X	23 399	
3329117105	Industrial carbon steel (cast and fabricated) butterfly valves, except high-pressure types, including elastomer and fluoroelastics lined, manual and power-operated, on-off valves	2002.. 10	X	X	49 973
	1997.. 14	X	X	121 176	
3329117107	Industrial alloy steel and other metal butterfly valves, except high-pressure types, including elastomer and fluoroelastics lined, manual and power-operated, on-off valves	2002.. 9	X	X	64 238
	1997.. 13	X	X	30 307	
3329117109	Industrial high-pressure iron butterfly valves (shut-off to full ANSI class ratings), manual and power-operated, on-off valves	2002.. 7	X	X	24 986
	1997.. 5	X	X	23 603	
3329117111	Industrial high-pressure carbon steel (cast and fabricated) butterfly valves (shut-off to full ANSI class ratings), manual and power-operated, on-off valves	2002.. 8	X	X	22 822
	1997.. 7	X	X	38 177	
3329117113	Industrial high-pressure alloy steel and other metal butterfly valves (shut-off to full ANSI class ratings), manual and power-operated, on-off valves	2002.. 10	X	X	54 112
	1997.. 11	X	X	60 291	
3329117115	Industrial butterfly valve actuators (power-operated, on-off mounted)	2002.. 8	X	X	25 352
	1997.. 12	X	X	41 008	
33291172	Parts for industrial butterfly valves (all metals, pressures, and types), including manual and power-operated, on-off valves	2002.. N	X	X	23 276
	1997.. N	X	X	31 490	
3329117217	Parts for industrial butterfly valves (all metals, pressures, and types), including manual and power-operated, on-off valves	2002.. 16	X	X	23 276
	1997.. 14	X	X	31 490	
3329117Y	Industrial butterfly valves (all metals, pressures, and types), including manual and power-operated, on-off valves, nsk	2002.. N	X	X	34 980
	1997.. N	X	X	2 433	
3329117YVV	Industrial butterfly valves (all metals, pressures, and types), including manual and power-operated, on-off valves, nsk	2002.. N	X	X	34 980
	1997.. N	X	X	2 433	
3329119	Industrial plug valves (all metals, pressures, and types), including lubricated, cylindrical eccentric, and sleeve-lined	2002.. N	X	X	260 396
	1997.. N	X	X	359 633	
33291191	Industrial plug valves, all metals, pressures, and types, including lubricated, cylindrical eccentric, and sleeve-lined, except parts	2002.. N	X	X	244 770
	1997.. N	X	X	D	
3329119101	Industrial iron (including ductile) plug valves (all pressures and types), including lubricated, cylindrical eccentric, and sleeve-lined	2002.. 10	X	X	101 592
	1997.. 15	X	X	110 738	

See footnotes at end of table.

Table 6a. **Products Statistics: 2002 and 1997—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
332911	Industrial valve manufacturing—Con.				
3329119	Industrial plug valves (all metals, pressures, and types), including lubricated, cylindrical eccentric, and sleeve-lined—Con.				
33291191	Industrial plug valves, all metals, pressures, and types, including lubricated, cylindrical eccentric, and sleeve-lined, except parts—Con.				
3329119103	Industrial carbon steel plug valves (all pressures and types), including lubricated, cylindrical eccentric, and sleeve-lined	2002.. 7	X	X	77 279
	..... 1997.. 18		X	X	108 258
3329119105	Industrial alloy steel and other metal plug valves (all pressures and types), including lubricated, cylindrical eccentric, and sleeve-lined	2002.. 11	X	X	65 899
	..... 1997.. 22		X	X	D
33291193	Parts for industrial plug valves (all metals, pressures, and types), including lubricated, cylindrical eccentric, and sleeve-lined	2002.. N	X	X	14 951
	..... 1997.. N		X	X	N
3329119308	Parts for industrial plug valves (all metals, pressures, and types), including lubricated, cylindrical eccentric, and sleeve-lined	2002.. 7	X	X	14 951
	..... 1997.. N		X	X	N
3329119Y	Industrial plug valves (all metals, pressures, and types), including lubricated, cylindrical eccentric, and sleeve-lined, nsk	2002.. N	X	X	675
	..... 1997.. N		X	X	D
3329119YVV	Industrial plug valves (all metals, pressures, and types), including lubricated, cylindrical eccentric, and sleeve-lined, nsk	2002.. N	X	X	675
	..... 1997.. N		X	X	D
332911B	All other miscellaneous industrial valves	2002.. N	X	X	986 508
	..... 1997.. N		X	X	1 016 097
332911B1	All other miscellaneous industrial valves	2002.. N	X	X	903 893
	..... 1997.. N		X	X	980 329
332911B101	Industrial valve cocks and stops (all metals, pressures, and types)	2002.. 14	X	X	93 313
	..... 1997.. 9		X	X	22 817
332911B103	Industrial diaphragm and pinch valves, including operators (all metals, pressures, and types), except automatic valves	2002.. 13	X	X	103 076
	..... 1997.. 13		X	X	76 073
332911B105	Industrial iron and steel pop safety valves and relief valves (more than 15 lb, w.s.p.)	2002.. 18	X	X	125 039
	..... 1997.. 19		X	X	208 348
332911B107	Industrial brass and bronze pop safety valves and relief valves (more than 15 lb, w.s.p.)	2002.. 6	X	X	78 697
	..... 1997.. 13		X	X	102 061
332911B109	Industrial compressed gas cylinder valves	2002.. 7	X	X	78 282
	..... 1997.. 11		X	X	117 458
332911B111	Industrial valve steam traps (more than 15 lb, w.s.p.)	2002.. 8	X	X	49 684
	..... 1997.. 6		X	X	D
332911B115	Actuators for all other miscellaneous industrial valves, sold separately (power-operated, on-off mounted)	2002.. 20	X	X	180 155
	..... 1997.. 16		X	X	D
332911B118	All other miscellaneous industrial valves	2002.. 34	X	X	195 647
	..... 1997.. N		X	X	N
332911BY	All other miscellaneous industrial valves, nsk	2002.. N	X	X	82 615
	..... 1997.. N		X	X	35 768
332911BYVV	All other miscellaneous industrial valves, nsk	2002.. N	X	X	82 615
	..... 1997.. N		X	X	35 768
332911D	Nuclear valves (N-stamp only)	2002.. N	X	X	72 502
	..... 1997.. N		X	X	36 622
332911D1	Nuclear valves (N-stamp only), except parts	2002.. N	X	X	58 995
	..... 1997.. N		X	X	25 289
332911D102	Gate, globe, and check valves	2002.. 9	X	X	19 456
	..... 1997.. N		X	X	N
332911D108	Valves	2002.. 11	X	X	39 539
	..... 1997.. N		X	X	N
332911D2	Parts for nuclear valves (N-stamp only)	2002.. N	X	X	8 669
	..... 1997.. N		X	X	9 435
332911D213	Parts for nuclear valves (N-stamp only)	2002.. 5	X	X	8 669
	..... 1997.. 8		X	X	9 435
332911DY	Nuclear valves (N-stamp only), nsk	2002.. N	X	X	4 838
	..... 1997.. N		X	X	1 898
332911DYVV	Nuclear valves (N-stamp only), nsk	2002.. N	X	X	4 838
	..... 1997.. N		X	X	1 898
332911F	Automatic regulating and control valves and parts (except nuclear), power-operated, designed for modulating (throttling) service	2002.. N	X	X	1 993 268
	..... 1997.. N		X	X	2 134 578
332911F1	Automatic regulating and control valves and parts (except nuclear), power-operated, designed for modulating (throttling) service	2002.. N	X	X	1 993 268
	..... 1997.. N		X	X	2 134 578
332911F100	Automatic regulating and control valves and parts (except nuclear), power-operated, designed for modulating (throttling) service ¹	2002.. 78	X	X	1 993 268
	..... 1997.. 107		X	X	2 134 578
332911H	Solenoid-operated valves and parts, except nuclear and fluid power transfer	2002.. N	X	X	377 718
	..... 1997.. N		X	X	485 022
332911H1	Solenoid-operated valves and parts, except nuclear and fluid power transfer	2002.. N	X	X	377 718
	..... 1997.. N		X	X	485 022
332911H100	Solenoid-operated valves and parts, except nuclear and fluid power transfer ¹	2002.. 33	X	X	377 718
	..... 1997.. 33		X	X	485 022

See footnotes at end of table.

Table 6a. Products Statistics: 2002 and 1997—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
332911	Industrial valve manufacturing—Con.				
332911W	Industrial valve manufacturing, nsk, total	2002.. N	X	X	351 916
		1997.. N	X	X	288 065
332911WY	Industrial valve manufacturing, nsk, total	2002.. N	X	X	351 916
		1997.. N	X	X	288 065
332911WYWW	Industrial valve manufacturing, nsk, for nonadministrative-record establishments	2002.. N	X	X	177 233
		1997.. N	X	X	137 832
332911WYWY	Industrial valve manufacturing, nsk, for administrative-record establishments	2002.. N	X	X	174 683
		1997.. N	X	X	150 233

¹For additional detail, see Current Industrial Report MA334B, Selected Instruments and Related Products.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p–10 to 19 percent estimated; q–20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3329111	Gates, globes, angles, straightway (Y-type) check, stop and check, cross, 3- and 4-way, and other industrial valves	
	United States	2002 .. 1 471 742
		1997 .. 1 317 414
	California	2002 .. 203 806
		1997 .. 84 038
	Illinois	2002 .. 81 086
		1997 .. 52 651
	Iowa	2002 .. 27 437
		1997 .. 30 963
	Massachusetts	2002 .. 53 937
		1997 .. 51 065
	New Jersey	2002 .. 123 875
		1997 .. 39 553
	New York	2002 .. 55 213
		1997 .. 31 694
	North Carolina	2002 .. 87 342
		1997 .. 78 402
	Ohio	2002 .. 73 145
		1997 .. 108 001
	Oklahoma	2002 .. 43 235
		1997 .. 52 679
	Pennsylvania	2002 .. 31 664
		1997 .. 79 735
	Texas	2002 .. 94 799
		1997 .. 206 308
3329113	Industrial valves for water works and municipal equipment (IBBM, AWWA, and UL)	
	United States	2002 .. 975 514
		1997 .. 741 713
	California	2002 .. 56 130
		1997 .. 37 206
	Pennsylvania	2002 .. 27 507
		1997 .. 12 507
3329115	Industrial ball valves (all metals, pressures, and types), including manual and power-operated, on-off valves	
	United States	2002 .. 1 102 392
		1997 .. 1 161 437
	Illinois	2002 .. 50 694
		1997 .. 78 097
	Ohio	2002 .. 92 532
		1997 .. 84 011
	Oklahoma	2002 .. 180 449
		1997 .. 137 699
	Pennsylvania	2002 .. 36 197
		1997 .. 38 904
	Tennessee	2002 .. 15 149
		1997 .. N
	Texas	2002 .. 148 488
		1997 .. 251 772
3329117	Industrial butterfly valves (all metals, pressures, and types), including manual and power-operated, on-off valves	
	United States	2002 .. 543 763
		1997 .. 491 396
	California	2002 .. 39 875
		1997 .. N
	Pennsylvania	2002 .. 14 664
		1997 .. 13 919
	Texas	2002 .. 85 345
		1997 .. 111 626
3329119	Industrial plug valves (all metals, pressures, and types), including lubricated, cylindrical eccentric, and sleeve-lined	
	United States	2002 .. 260 396
		1997 .. 359 633
	Illinois	2002 .. 9 319
		1997 .. 8 511
	Texas	2002 .. 64 835
		1997 .. 116 300
332911B	All other miscellaneous industrial valves	
	United States	2002 .. 986 508
		1997 .. 1 016 097
	California	2002 .. 16 678
		1997 .. 67 873
	Connecticut	2002 .. 33 957
		1997 .. N
	Illinois	2002 .. 48 908
		1997 .. 28 505
	Massachusetts	2002 .. 23 385
		1997 .. N
	Michigan	2002 .. 68 421
		1997 .. 64 143
	Minnesota	2002 .. 18 172
		1997 .. N
	New Jersey	2002 .. 19 004
		1997 .. N
	New York	2002 .. 101 547
		1997 .. 107 018
	North Carolina	2002 .. 95 895
		1997 .. 118 190
	Ohio	2002 .. 49 451
		1997 .. 60 991
	Oklahoma	2002 .. 23 196
		1997 .. 14 517
	Pennsylvania	2002 .. 128 331
		1997 .. 125 281
	South Carolina	2002 .. 7 899
		1997 .. N
	Texas	2002 .. 91 388

See footnotes at end of table.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997—Con.**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
332911B	All other miscellaneous industrial valves—Con. United States—Con. 1997..	53 349
332911D	Nuclear valves (N-stamp only) United States..... 2002.. Pennsylvania..... 2002.. 1997..	72 502 36 622 5 303 3 988
332911F	Automatic regulating and control valves and parts (except nuclear), power-operated, designed for modulating (throttling) service United States..... 2002.. 1997.. California..... 2002.. 1997.. Illinois..... 2002.. 1997.. Michigan..... 2002.. 1997.. New Jersey..... 2002.. 1997.. New York..... 2002.. 1997.. North Carolina..... 2002.. 1997.. Ohio..... 2002.. 1997.. Pennsylvania..... 2002.. 1997.. South Carolina..... 2002.. 1997.. Texas..... 2002.. 1997..	1 993 268 2 134 578 342 013 333 669 70 660 35 274 44 718 N 16 201 34 555 33 221 26 721 44 520 N 88 899 108 811 99 061 101 480 29 193 79 730 475 521 341 357
332911H	Solenoid-operated valves and parts, except nuclear and fluid power transfer United States..... 2002.. 1997.. California..... 2002.. 1997.. New Jersey..... 2002.. 1997.. New York..... 2002.. 1997..	377 718 485 022 15 956 9 680 39 781 105 272 17 290 N

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
332911	Industrial valve manufacturing		
00900001	Total materials .....2002..	X	3 102 351
	.....1997..	X	3 228 720
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....2002..	X	175 276
	.....1997..	X	172 688
332000AC	Metal stampings .....2002..	X	57 573
	.....1997..	X	58 343
33290003	Valves, fittings, and couplings purchased for further assembly (excluding forgings) .....2002..	X	266 982
	.....1997..	X	257 919
33200029	Other fabricated metal products (excluding forgings, metal stampings, valves, fittings, couplings, bolts, nuts, screws, washers, rivets, and other screw machine products) .....2002..	X	234 398
	.....1997..	X	209 557
33151101	Iron castings (rough and semifinished) .....2002..	X	239 846
	.....1997..	X	250 560
33151009	Steel castings (rough and semifinished) .....2002..	X	374 380
	.....1997..	X	332 100
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) .....2002..	X	63 112
	.....1997..	X	62 072
33152500	Copper and copper-base alloy castings (rough and semifinished) .....2002..	X	113 368
	.....1997..	X	116 472
33152009	Other nonferrous castings (rough and semifinished) .....2002..	X	63 614
	.....1997..	X	53 048
33211101	Iron and steel forgings .....2002..	X	89 319
	.....1997..	X	92 008
33211201	Nonferrous forgings .....2002..	X	61 622
	.....1997..	X	59 620
33120007	Steel bars, bar shapes, and plate (excluding castings, forgings, and fabricated metal products) .....2002..	X	137 346
	.....1997..	X	136 736
33120016	Steel sheet and strip (including tinplate) .....2002..	X	41 484
	.....1997..	X	N
33120033	All other steel shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	55 875
	.....1997..	X	55 869
33141104	Copper and copper-base alloy refinery shapes (excluding castings, forgings, and fabricated metal products) .....2002..	X	56 129
	.....1997..	X	N
33142105	Copper and copper-base alloy rod, bar, and mechanical wire (including extruded and drawn shapes) .....2002..	X	113 319
	.....1997..	X	108 143
33142135	Copper and copper-base alloy pipe and tube (excluding castings, forgings, and fabricated metal products) .....2002..	X	18 826
	.....1997..	X	18 039
33142145	All other copper and copper-base alloy shapes and forms (excluding castings, forgings, fabricated metal products, refinery shaped rods, bars, mechanical wire, pipes, and tubes) .....2002..	X	14 993
	.....1997..	X	16 662
33100038	Aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	45 662
	.....1997..	X	N
33100082	Other nonferrous metal shapes and forms (excluding aluminum and aluminum-base alloy and copper and copper-base alloy castings, forgings, and fabricated metal products) .....2002..	X	14 999
	.....1997..	X	N
00190060	Scrap, including iron, steel, aluminum and aluminum-base alloy (excluding home scrap) .....2002..	X	38 680
	.....1997..	X	37 207
33531225	Fractional horsepower electric motors and generators (less than 1 hp) .....2002..	X	18 718
	.....1997..	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....2002..	X	26 265
	.....1997..	X	24 439
32622003	Hydraulic and pneumatic hose (without fittings), rubber and plastics inner tube type, wire or textile reinforced .....2002..	X	6 246
	.....1997..	X	6 405
32622005	Other rubber and plastics hose and belting .....2002..	X	21 804
	.....1997..	X	9 055
33999103	Gaskets (all types), and packing and sealing devices .....2002..	X	66 875
	.....1997..	X	64 656
32600017	Fabricated rubber products (excluding tires, tubes, hose, belting, and gaskets) .....2002..	X	38 993
	.....1997..	X	38 841
32610011	Fabricated plastics products (excluding gaskets) .....2002..	X	46 255
	.....1997..	X	47 541
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	300 442
	.....1997..	X	678 711
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	299 950
	.....1997..	X	322 029

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.